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Cobb

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[54] ULTRASONIC FLUID COMPOSITION MONITOR

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[57] ABSTRACT

A method and apparatus for continuous monitoring of the composition of a fluid mixture traveling through a conduit. The relative component concentration of the fluid mixture of a liquid/liquid or solid/liquid mixture is monitored with a non-intrusive ultrasonic apparatus. The relative component concentration of the fluid mixture is determined by measuring ultrasonic propagation parameters and temperature and comparing these measured parameters to calibrated data based on analytical measurements of samples of the process fluid mixtures. The calibrated data is obtained by measuring propagation parameters and analyzing process fluid mixtures at a different time from the measurements of process fluid mixtures.

6 Claims, 4 Drawing Sheets

